Astragalus oophorus S. Watson var. clokeyanus Barneby

CLOKEY EGGVETCH

FAMILY: Fabaceae, the legume family.

SYNONYMS: Astragalus artipes (misapplied)

STATUS:

Heritage Program SENSITIVE LIST, ranks: G4 T2 S2

USFWS/ESA: species of concern, formerly CANDIDATE or PROPOSED. STATE OF NEVADA: none.

BLM: Special Status Species. USFS: Humboldt-Toiyabe NF Sensitive Species. NNNPS: watch list.

- **POPULATION CENSUS: 23 occurrences mapped** at 1.0 km (0.6 mi) separation, OR **32 occurrences mapped** at 0.16 km (0.1 mi) separation; total estimated **individuals 4313**+, total estimated **area 111**+ **ha (274**+ **ac)**. **TREND:** unknown.
- **IMPACTS AND MAJOR THREATS:** Populations are small in numbers and area, increasing their vulnerability to intense disturbance by hiking, skiing, camping, and other recreation uses or developments, feral horse and burro trampling, commercial developments and DOE activities on the Nevada Test Site, military activities, fire suppression activities, etc. Modern fire suppression may be curtailing the natural maintenance of appropriate habitats.
- **INVENTORY EFFORT:** Systematic surveys have been conducted, but substantial potential habitat likely remains to be examined. Most recent entered survey 1998, average year of last survey 1994.

Years since last entered survey (percent of mapped records at various survey ages): 0-5 yrs: 56.3%; 6-10 yrs: 34.4%; 11-20 yrs: 6.3%; 31-50 yrs: 3.1%.

- **LAND MANAGEMENT** in decreasing predominance: Humboldt-Toiyabe National Forest, U. S. Department of Defense, U. S. Department of Energy, U. S. Bureau of Land Management, designated wilderness, private lands.
- **RANGE:** Clark and Nye counties, Nevada. Considered endemic to the Spring Mountains until recent discoveries farther north on the Nevada Test Site. Maximum **range dimension 167.2 km (103.9 mi)** excluding most disjunct record.
- **ELEVATIONS RECORDED:** 5400-8990 feet (1646-2740 meters).
- **HABITAT:** Dry to slightly moist open slopes, flats, or drainages on gravelly soil derived from limestone or rhyolitic volcanics, in openings or under shrubs in Pinus ponderosa forest, old burns with Quercus gambelii, and in pinyon-juniper woodland.
- **PHENOLOGY:** flowering late-spring, in late May and June with fruit and seed set by late June or July. Range of most frequent **survey months:** May-August.
- LIFE-FORM AND HABIT: small perennial herb.
- **DESCRIPTION:** This variety is differentiated from var. oophorus by its smaller flowers and lesser number of ovules (28/pod, for Clokey's eggvetch and 41-53/pod for egg milkvetch).
- **PHOTOGRAPHS:** Anderson (1998), Knight and Smith (1996), Knight et al. (1997), Weixelman and Atwood (1990); Nevada Natural Heritage Program files.
- ILLUSTRATIONS: Mozingo and Williams (1980), Weixelman and Atwood (1990).
- **OTHER GENERAL REFERENCES** (listed separately): Barneby (1964), Beatley (1976), Beatley (1977), Beatley (1977), Clokey (1951), Nachlinger (1994), Spahr et al. (1991).

SPECIFIC REFERENCES:

- Anderson, D. C. 1998. Distribution of Clokey's Eggvetch (Astragalus oophorus var. clokeyanus) on The Nevada Test Site. Las Vegas: Bechtel Nevada, prepared for the U. S. Department of Energy under contract DE-AC08-96NV11718.
- Barneby, R. C. 1954. Pugillus astragalorum XVI: Minor novelties from Nevada. Leaflets of Western Botany 7: 192-196.
- Morefield, J. D. 1993. Status report for Astragalus oophorus var. clokeyanus Barneby. Carson City: Nevada Natural Heritage Program, prepared for the U. S. Fish and Wildlife Service, Reno.
- Nachlinger, J. and S. Sheldon. 1995. Status report for Astragalus oophorus var. clokeyanus. Reno: The Nature Conservancy, prepared for the U. S. Fish and Wildlife Service, Reno. 20 pages + two appendices.
- U. S. Fish and Wildlife Service. 1998. Notice of reclassification of four candidate taxa. Federal Register 63(63): 16217-16218.
- Woodbury, K. 1979. Status report for Astragalus oophorus var. clokeyanus. Portland, Oregon: U. S. Fish and Wildlife Service.